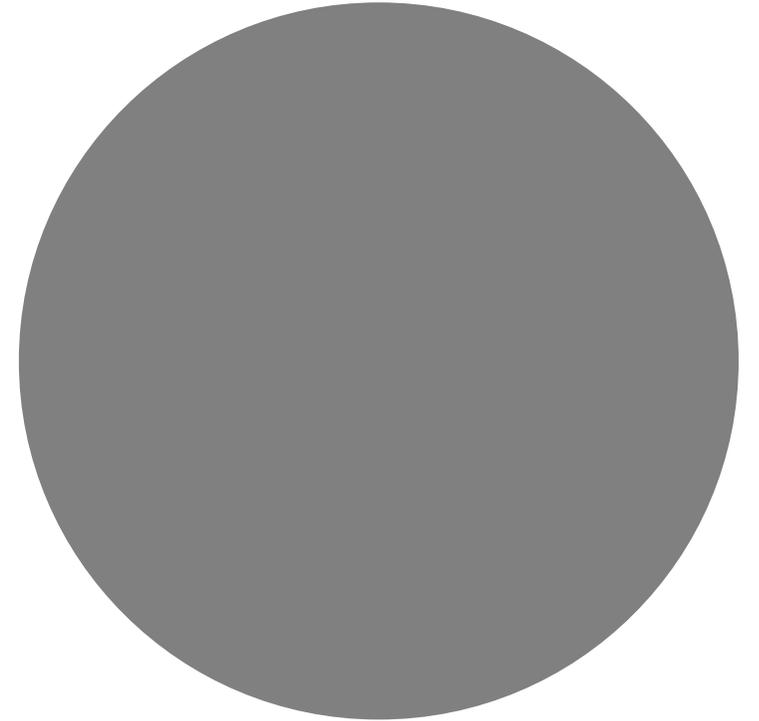


Next Generation 911 in Louisiana

Richard McGuire, Louisiana NENA NG-911 Committee

Anthony Sommers, Louisiana NENA NG-911 Committee



911 Services in Louisiana

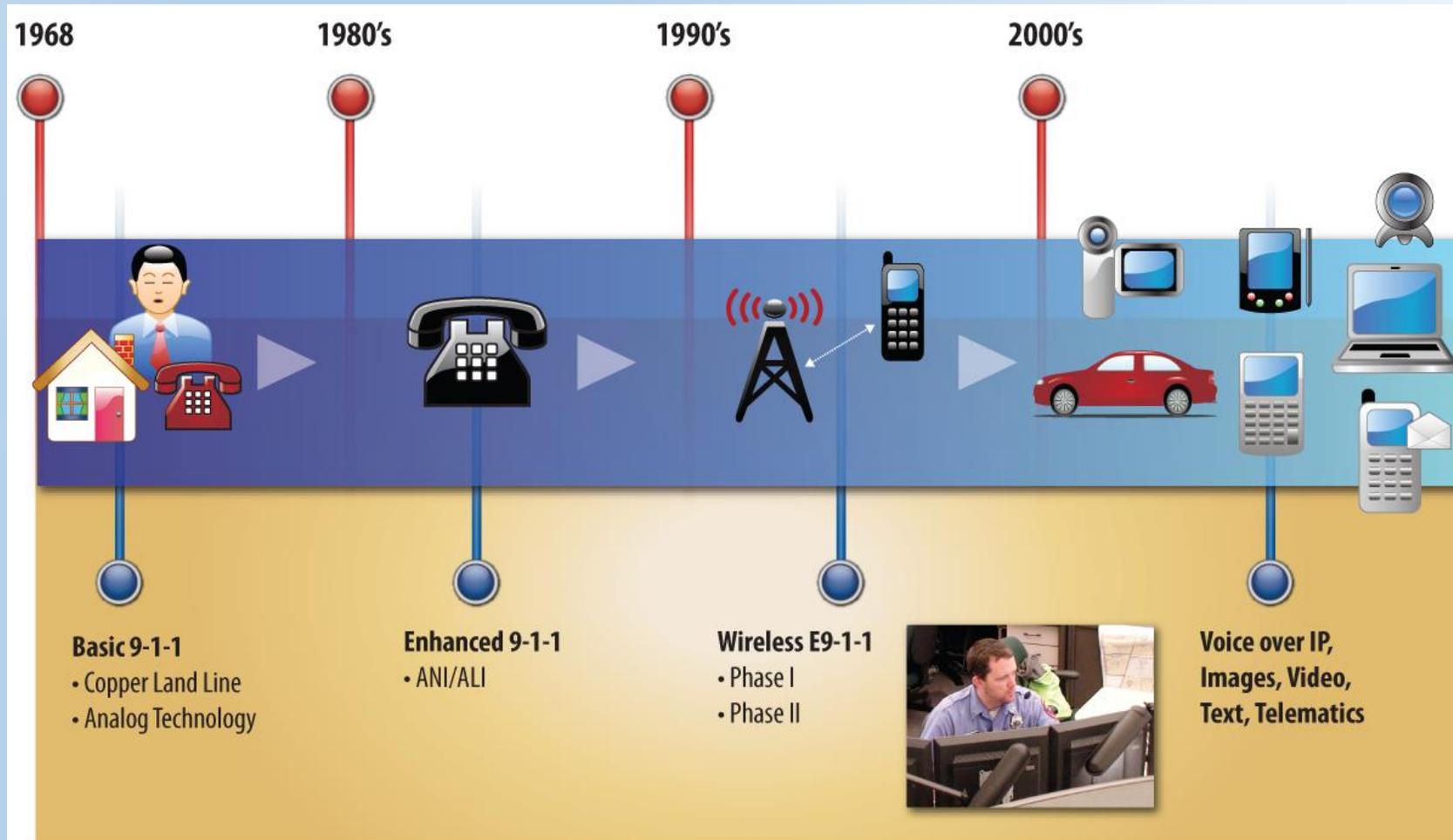
- 1983 HB 1326 became RS 33:9101
 - Allows for the Creation of Communications Districts by each Police Jury for the implementation and maintenance of the 9-1-1 emergency reporting system.
 - Provides a wide-range of methods by which the Communications District could operate so as to tailor the 9-1-1 system for each parish. Allowing for an integration with other Public Safety Agencies for effective inter-agency communications.
 - Funding is done primarily through emergency telephone service fees on each telephone subscriber, but allows for local property taxes if the parish so chooses.



Organizational Structures for Communications Districts

- Stand Alone Communications District
 - Uses Communications District Employees to process 9-1-1 Calls.
 - Often provides dispatch services to Law, Fire and EMS agencies.
 - Allows for a centralized services model for reduced cost to the parish.
- 911 Co-located with another Public Safety Agency
 - The Communications District will contract with another Public Safety Agency to answer and process 9-1-1 calls.
 - Leverages funding from multiple sources to support a centralized PSAP that usually covers 9-1-1 call taking and all Public Safety Dispatching.
 - Predominate model used in rural parishes.

Timeline of Today's US 9-1-1 System



Why do we need NG9-1-1?

- Current 911 system is antiquated
 - Service providers are wanting to move to IP base delivery system
- Commercial sector technology capability's are more advanced than most public safety technologies.
 - If Uber, Pizza Hut and Starbucks can see your name, location and get real time updated info, why can 911?
 - Pictures/Video
 - Automated Notifications (ACN, Sensors)
- Wide spectrum of users, emergency support needs
 - Deaf and hard of hearing, speech impaired
 - Non-English speaking callers
 - Constantly increasing mobile users – location challenges



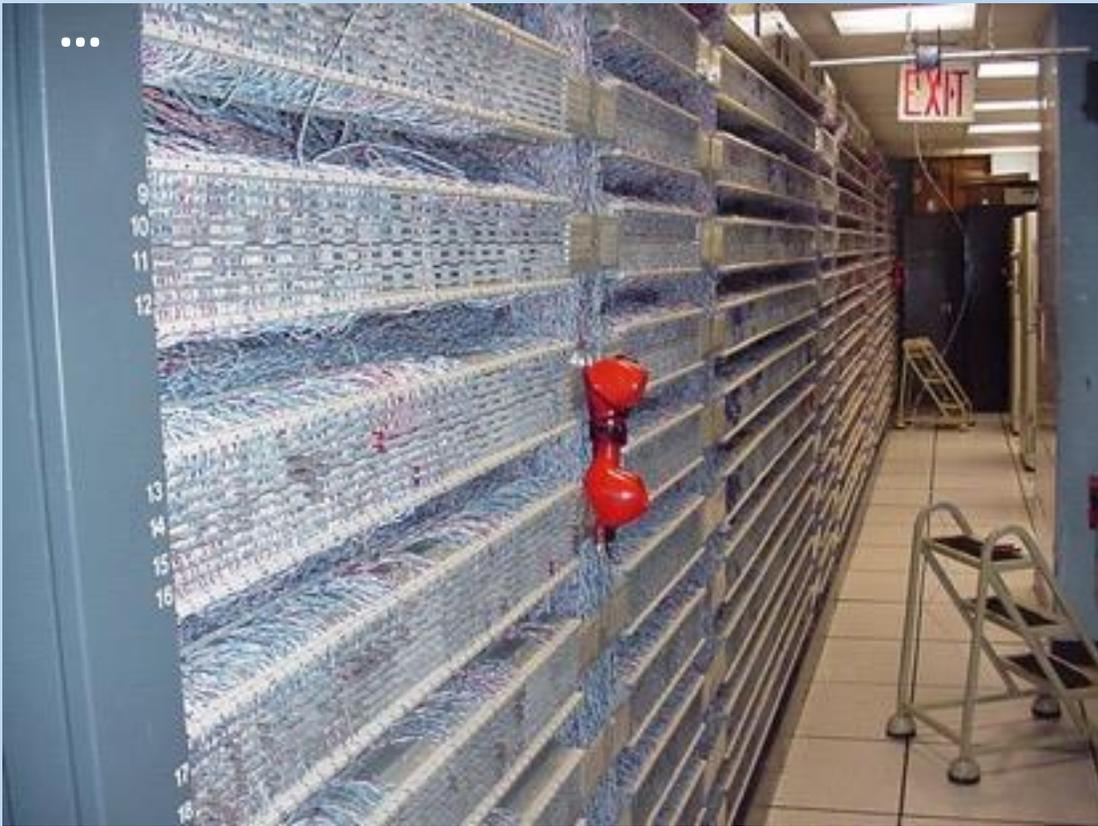
What is NG911?



Next Generation 9-1-1 (NG911) is a secure, IP-based, open-standards, interoperable system of networks that are comprised of hardware, software, data, and operational policies and procedures that provides standard interfaces from emergency call and message services; will process all types of emergency calls; integrates additional data; Delivers these calls to the appropriate call center and first responder networks.

What we have now...

And where we need to go





NG911 provides advantages for 911 Centers

- Allows for various Types of calls to be received: voice, text, image, video, and other emerging technologies.

- Ability to transfer and receive calls from PSAPs outside the local region (along with transfer of associated call data).

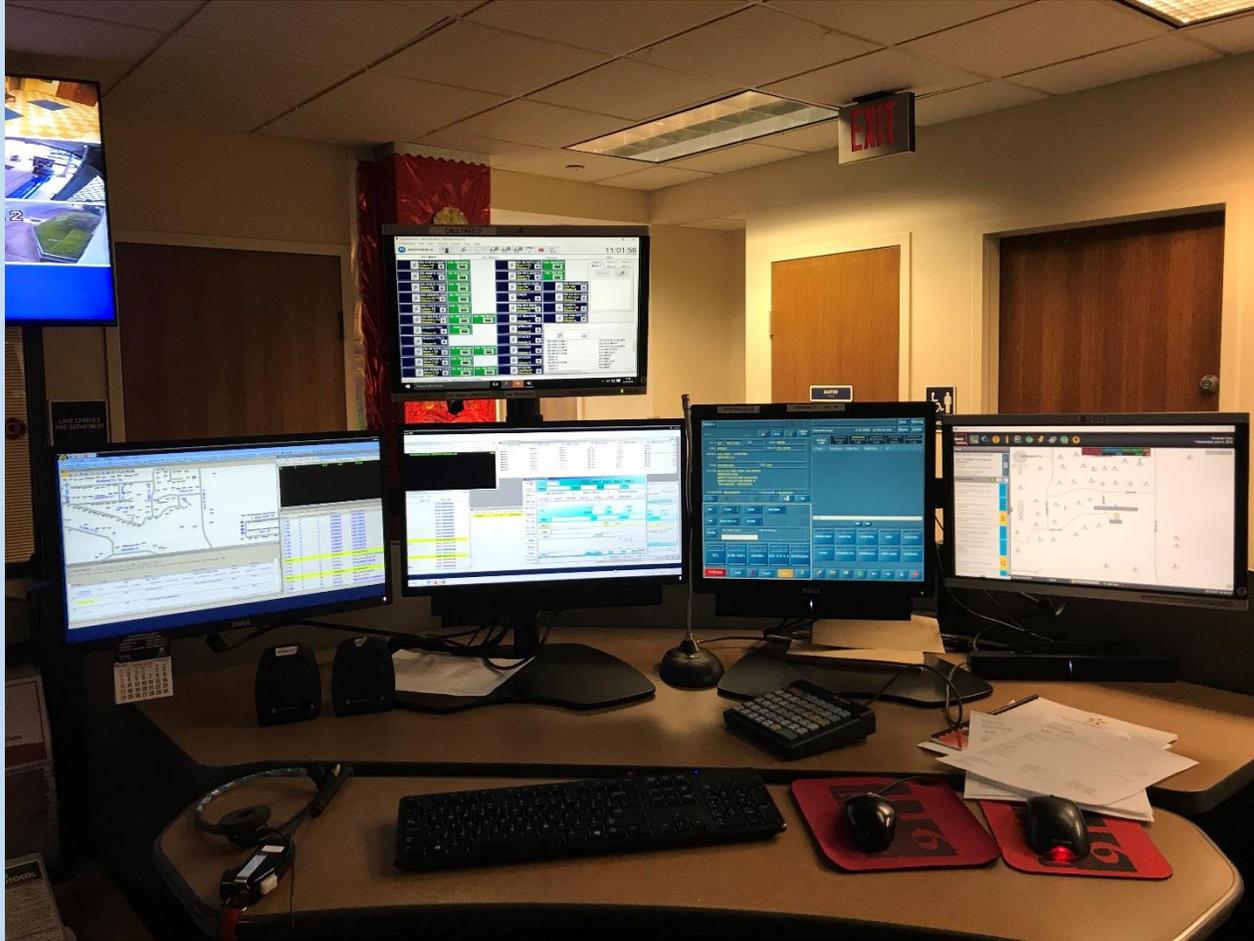
- The capability to accept supplemental information designed to facilitate emergency services.

- Provides standardization of technology and applications which will allow for more cost effective solutions

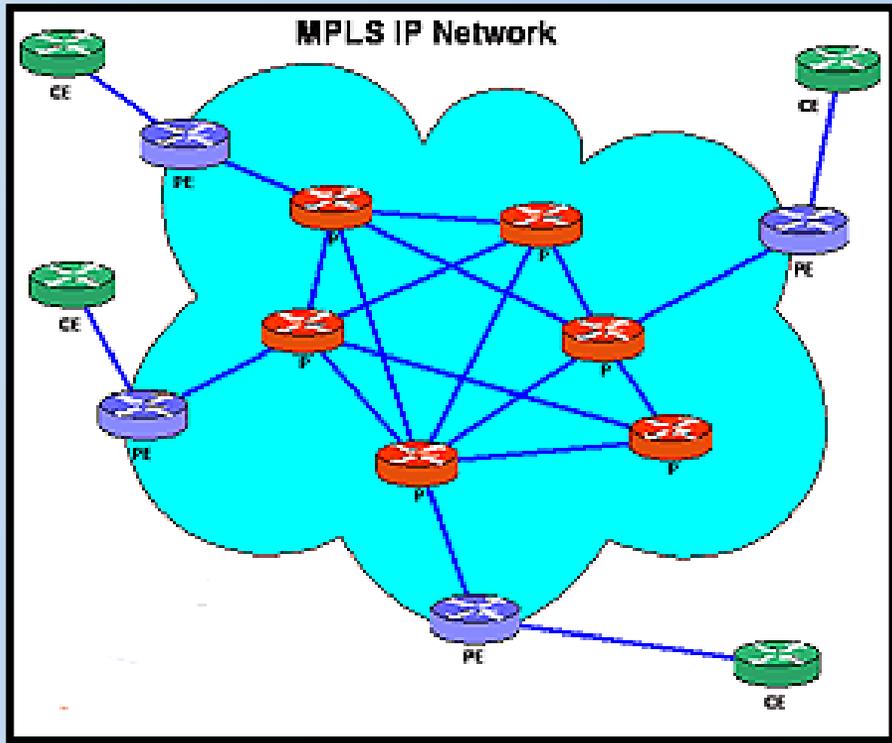
Components of a Fully Functional NG911 System



911 Center Equipment needed for NG 9-1-1



- E-911 Telephone System (46/64)
- Computer Aided Dispatch System (30/64)
- Audio/Data Recorder



ESInet

Private, managed emergency services IP network infrastructure upon which application platforms and core services can be deployed

MSAG

Street Name	Low	High	Community	O/E	ESN
CLWD VLG CT	4203	4207	MY COUNTY	O	101
CLWD VLG CT	4202	4210	CITY B	E	103
COACHMAN AV W	2900	4799	CITY A	B	102

ALI Database

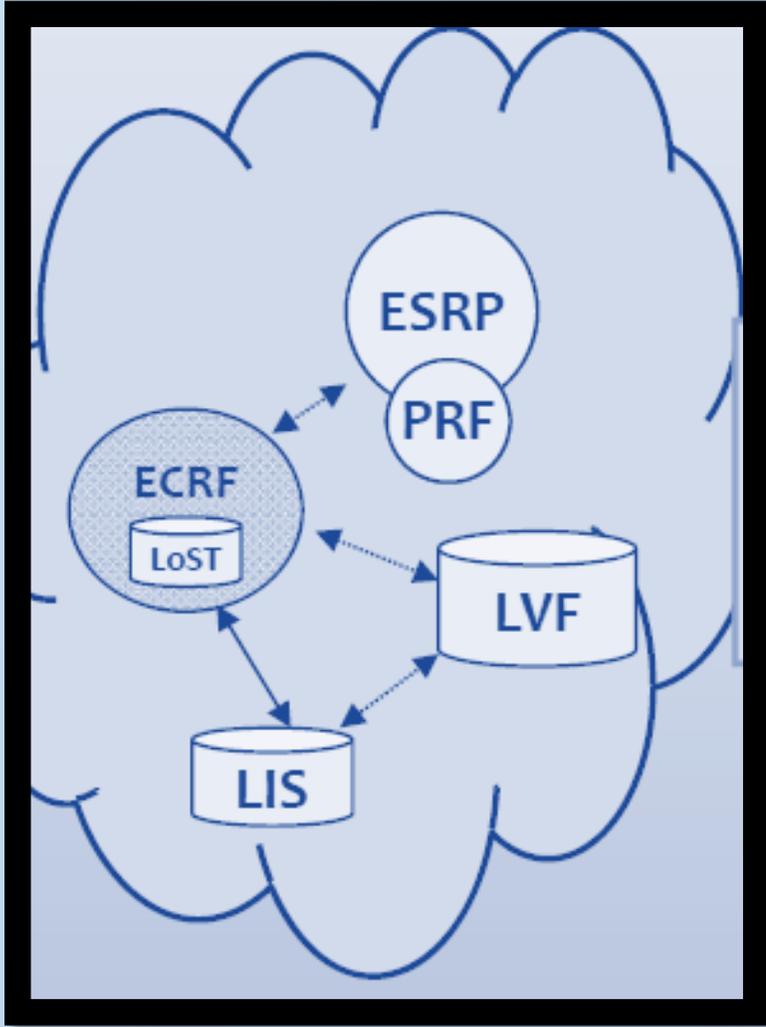
TN	Address	Community	Name	ESN
813-555-1234	4205 CLWD VLG CT	MY COUNTY	PUBLIC, J Q	101
813-555-4321	4208 CLWD VLG CT	CITY B	SMITH, JANE	103
813-555-6789	3214 COACHMAN AV W	CITY A	JONES, MARY	102

Selective Router Database

TN	ESN
813-555-1234	101
813-555-4321	103
813-555-6789	102

Databases

Data relating to the 9-1-1 caller's location and personal information, PSAP boundaries, buildings, call routing rules, etc.



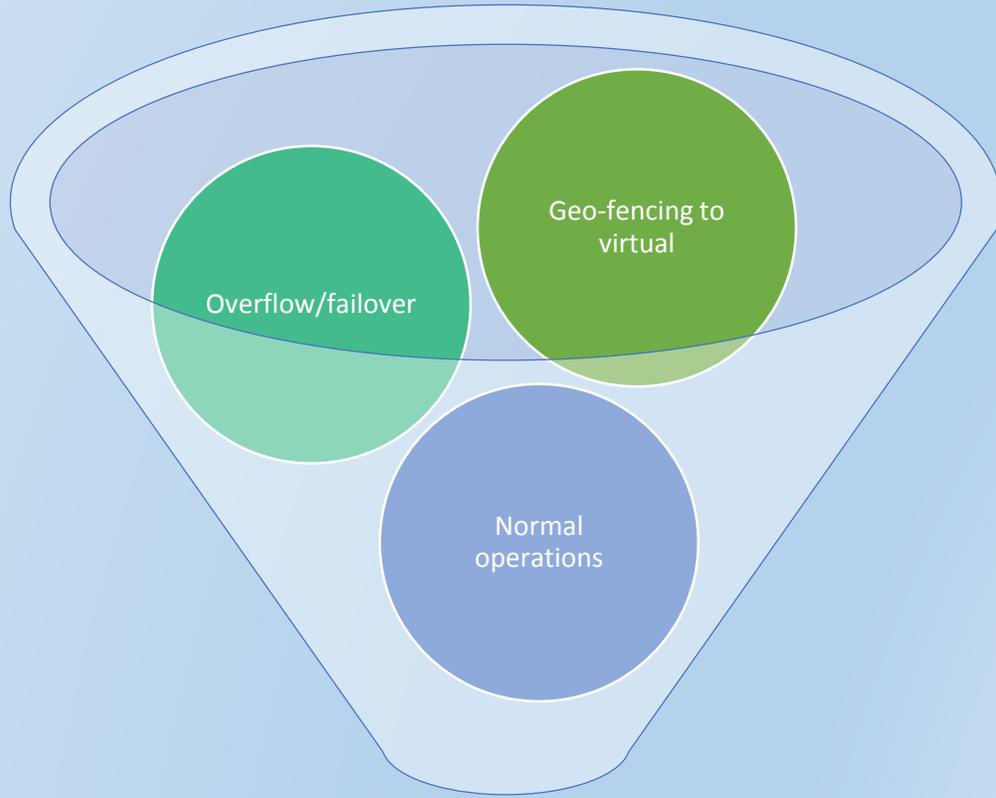
Core Services

Components [equipment/processes] that make up the system functionality needed to process a 9-1-1 call from call origination through call completion.



Geo Spatial Routing (*a subset of core services*)

Delivery of 9-1-1 calls to the most appropriate PSAP based upon the calling device's location compared to GIS data.



911 Call delivered
to PSAP B

Policy Based Routing (*a subset of core services*)

Delivery of 9-1-1 calls to the most appropriate PSAP based upon pre-defined conditions and or situations.

COMMUNICATIONS Standard Operating Procedure		
	Distribution Group:	COMMUNICATIONS
	Effective Date:	
	Reviewed Date:	
	Revision Date:	
	Rescinds:	
Authority of Communications Commander		
Related References/Accreditation Standards:		
Procedure Number:		
Subject:		

Procedures

Process and policy for handling 9-1-1 voice, text, images, video from various devices and applications.

NG911 Benefits

- Greater Responder Safety
 - Bio-Sensors (e.g., Building Sensors)
 - Gunshot Notification
 - Live Camera Monitoring
 - Transportation Ops Systems
- Enhanced Life & Property Protection
 - Advanced Roadway Technology
 - Smart Buildings
 - Vehicle Telematics
 - Personal Telematics
- Improved Interoperability
 - Call Transfer
 - Live Mapping
 - Mutual Aid Communications
- Accelerated Response Times
 - Geo-Location Information
 - Building Sensors
 - Real-Time Public Notification

NG911 Realities

- There are many alternative paths for the migration from legacy to NG911
- Coordination among participating entities during transition may be complex and challenging
- Operating costs will be higher during transition because of the need to maintain legacy systems during NG911 deployment
- NG911 standards are constantly evolving
- While the standard for interim SMS text-to-911 is in operation, the standard for text-to-NG911 is still in development and other NG-911 services like video, and telematics have yet to be developed.

Louisiana Next Generation 9-1-1 Projects

- Louisiana Chapter of NENA's NG-911 Committee
 - The Louisiana Address Maintenance Plan.
 - The survey of Communications districts for NG911 readiness.
 - Realtime GEOSPATIAL Data Sharing Project

Realtime GEOSPATIAL Data Sharing Project

Louisiana Public Safety Answering Points (PSAP's) have a need

- To be able to share addressing information amongst themselves and with other local and state entities. Data may include addresses, municipal boundaries and other pertinent data.**
- Have a need to have the ability for non-technical personnel to update geospatial information using a web browser, tablet computer, iPad, etc. where local GIS expertise does not exist.**
- The ability to easily download data to update Computer Aided Dispatch (CAD) Systems or connect CAD to online systems if capable.**

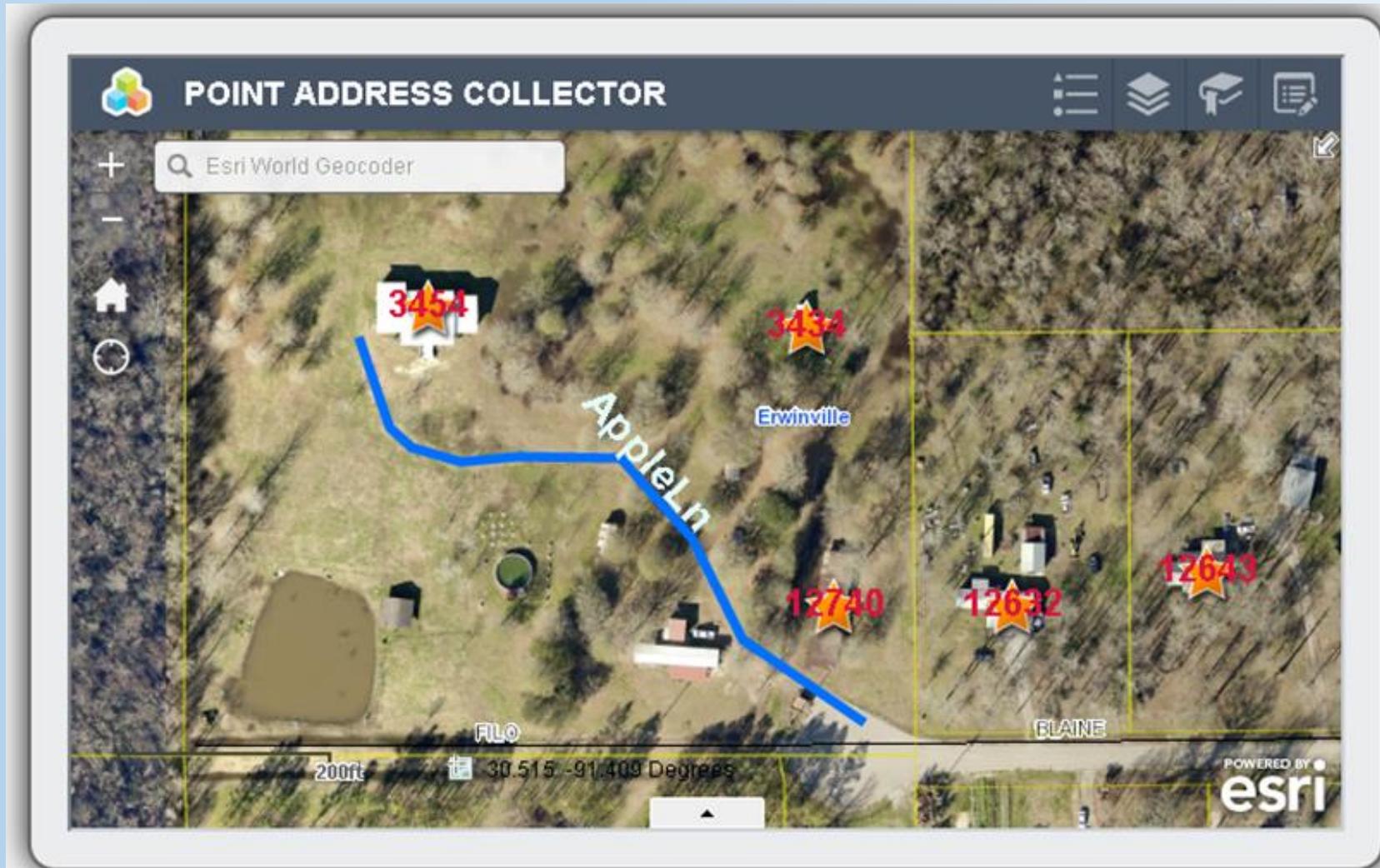
GEOSPATIAL Data Sharing

- **Real-time data sharing.**
- **Makes collaboration and data sharing effortless.**
- **Would enable the ability to determine if boundaries of neighboring parishes or municipalities align without having to exchange shapefiles.**
- **Can be used online without special software or expertise for those parishes that do not have it.**
- **Can also be used offline in the field for those places with little or no cell phone service using the ARC GIS Collector app.**

Methods to Update Data to Statewide GIS Database

- 1.APP OR WEB Portal Access to ARC GIS ONLINE.
- 2.Connection from ARCGIS Online to ARC GIS ONLINE.
- 3.Manual upload to ARC GIS online system from ARC GIS Desktop.

IPAD APP



OTHER USES FOR NG911 ADDRESS DATA

Local and State Level

- Emergency Preparedness and planning, situational awareness, by GOHSEP and Local OHSEP's.
- Reverse 9-1-1 systems used by local jurisdictions.
- Disaster fraud prevention by DCFS.
- Streamline sales tax collection by the accurate application of sales tax rates.
- School bus routing by local school boards.
- Improvement of spatial accuracy of internet map services like Google and MapQuest.
- Accurate voter precinct boundaries.

National Level

- Crash Reporting and Analysis, Transportation Planning, Land Use by the Federal Highway Administration
- Decennial enumeration of US population, maintaining Master Address File for the US CENSUS
- Regulatory enforcement, visualization and analysis, surveillance activities by the CDC.
- Match transactions for the purpose of estimating suite of house price indexes by the Federal Housing Finance Agency.
- Visualization and analysis, policy development and planning for delivery of services by the Veterans Administration.
- Improvement of spatial accuracy of internet map services like Google and MapQuest.

Next Generation 911 in Louisiana Questions?

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